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BELLSOUTH

Kathleen B. Levitz
Vice President-Federal Regulatory

March 4, 1999

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EX PARTE

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
The Portals
445 12th Street, S.W.
Washington, D.C. 20554

Re: CC Docket No. 96-98 and CC Docket No. 98-121

Dear Ms. Salas:

On March 4, 1999, Bob Blau and I, representing BellSouth, and Dr. Jeff Rohlfs and Dr. J. H. Webber of Strategic Policy Research, Inc. met with Commission staff to discuss a model SPR had developed to determine if a CLEC could profitably provide local service in the Atlanta, Georgia LATA. The following Commission staff attended some or all of the presentation: Bob Atkinson; Jennifer Fabian; Doug Galbi; Jake Jennings; Michael Kende; Don Stockdale; and Quyen Truong, all of the Common Carrier Bureau; Robert Pepper; Johnson Garrett; and Jon Wilkins of the Office of Plans and Policy; Commission Chief Economist Bill Rogerson and Deputy Chief Economist Pat De Graba. The presentation was based on the following attached documents.

In accordance with Section 1.1206 (b)(2), I am filing two copies of this notice in both of the proceedings identified above. Please place this notice in the records of both.

Sincerely,

Kathleen B. Levitz

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Vice President – Federal Regulatory

Attachments

cc: Bob Atkinson, Doug Galbi, Michael Kende, Don Stockdale, Pat De Graba, Johnson Garrett, Robert Pepper, Quyen Truong, Jennifer Fabian, Jake Jennings, Bill Rogerson, Jon Wilkins

THE TELCOMP© MODEL

I. PURPOSE

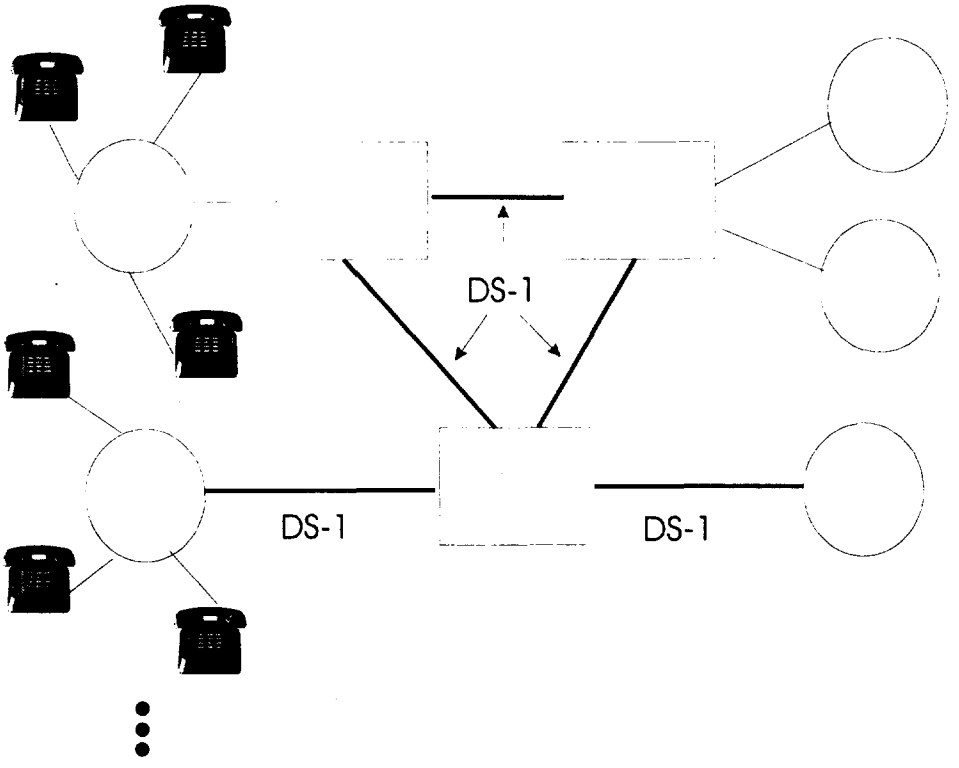
To evaluate the viability of local intraLATA competition using unbundled loops, leased interoffice facilities, and CLEC-provided switches.

II. GENERAL DESCRIPTION

A detailed bottom-up model which replicates the structure and determines the revenues and costs of a competitive local intraLATA network using the assumed serving arrangements.

III. POTENTIAL APPLICATIONS

- **Provide evidence as to the viability of competition in 271 proceedings;**
- **Provide evidence as to the viability of competition without switch UNEs; and**
- **Evaluate the impact of various UNE and collocation prices and practices on the viability of competition.**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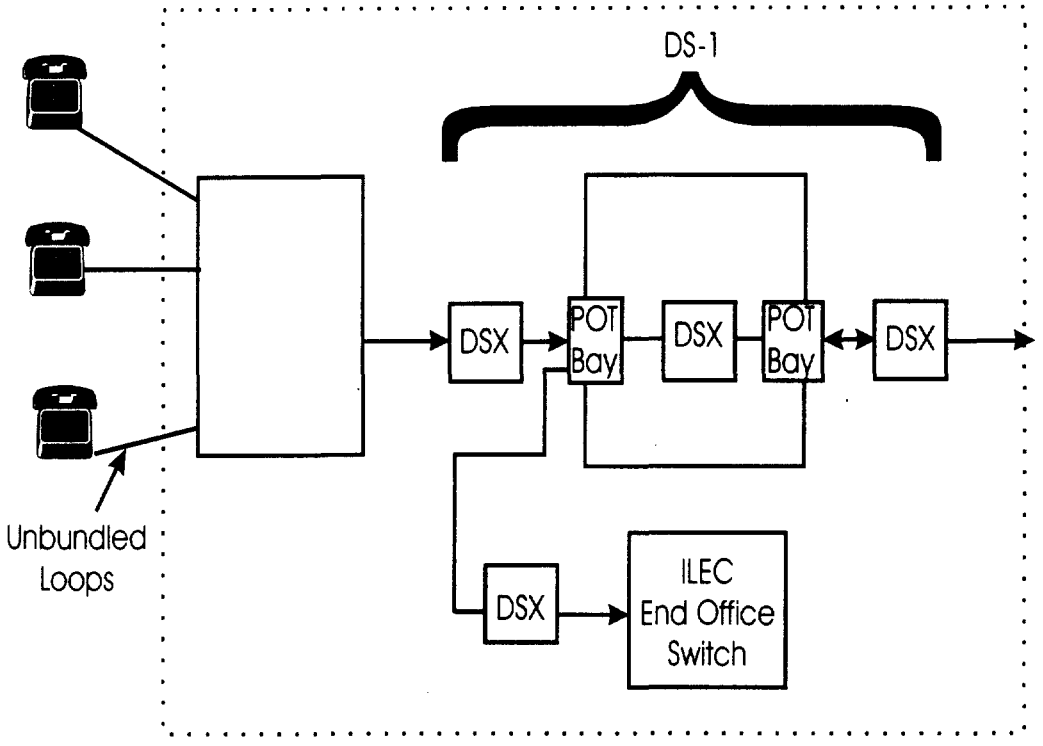
Wire Center Configuration



IV. MODEL STRUCTURE AND KEY ASSUMPTIONS

- **Competitor stands ready to provide service everywhere in the LATA or at a pre-specified subset of wire centers;**
- **Competitor leases loops and interoffice facilities from ILEC at UNE rates, but provides its own switches;**
- **Competitor reaps all revenues associated with lines it serves (basic, vertical services, interLATA access and intraLATA toll);**
- **Competitor may focus offerings to attract high-revenue customers; and**
- **Competitor may additionally provide interLATA toll service, which will affect both revenues and costs.**

V. COST CALCULATIONS

Most costs are based on published ILEC recurring and non-recurring UNE prices.

- **Costs are calculated for:**
  - **Loops and loop concentrators;**
  - **Interoffice facilities (connecting serving wire center to CLEC switch, interconnecting CLEC switches, and for trunks carrying terminating traffic to ILEC wire center);**
  - **Collocation, including all recurring and non-recurring costs paid to ILEC plus costs of CLEC equipment; and**
  - **CLEC provided switch (capital expenditure).**

VI. INPUT DATA

- **Detailed Information for each Wire Center to be Considered, Including:**
  - **Number of business and residence lines**
  - **Location (V&H)**
- **Traffic and Revenue Information**
  - **Traffic levels**
  - **Revenues**
    - -- **Local service**
    - -- **intraLATA toll**
    - -- **Vertical services**
    - -- **interLATA access charges**
- **Loops**
  - **Interoffice facilities**
  - **Collocation**
- **Competitor Information**
  - **Location of switches (or POPS)**
  - **Costs of switching equipment**
  - **SG&A costs (% of revenue)**

VII.OUTPUTS

Financial results over for a pre-specified ramp-up period:

- **Revenues**
- **Operating costs**
- **Capital investment (including non-recurring costs for UNE facilities)**
- **Profit and loss**
- **Cash flow**

Rate of return for the period

VIII. IMPLEMENTATION

- **Model, source code, and user guide are publicly available at www.spri.com;**
- **Model runs on a PC using the programming language MATHEMATICA®;**
- **Inputs and outputs in spreadsheet format; and**
- **User can modify input assumptions to perform sensitivity analyses.**

IX. MODEL USE TO DATE

Runs made for Atlanta LATA using wire center, pricing and revenue information provided by BellSouth.

Assumed 5 percent penetration of targeted markets in five years:

- **Smaller penetrations would not be sufficient to demonstrate effects;**
- **Larger penetrations would be more profitable; and**
- **5 percent penetration levels clearly attainable using existing OSS systems.**

Ran a number of cases, varying:

- **The competitor's marketing strategy (serve all customers equally or focus on high-revenue customers); and**
- **Whether interLATA toll was provided.**

X. RESULTS FOR ATLANTA

In Atlanta, this is a very profitable business under any of the assumptions tested:

- **Rate of return varied from a low of 34 percent to a high of 127 percent;**
- **The least profitable results occurred when all customers were targeted equally and no interLATA toll was provided;**
- **The most profitable results occurred when high-revenue customers were targeted and interLATA toll was provided;**
- **The business became profitable in the first or second year in all cases;**
- **Annual cash flow turned positive in the fourth year, at worst; and**
- **All funds were recovered by the third to the fifth year.**

XI. CONCLUSIONS

- **Telcomp is a modeling tool that can be used for a variety of purposes as competition advances into local service;**
- **Model assumptions are conservative – competitors can do better by selectively providing their own facilities and integrating operations with interLATA services;**
- **Results show that in Atlanta, intraLATA competition is viable, and switch UNEs are not necessary to promote competition;**
- **Competitors are likely to focus on high-revenue customers, since they provide the most profitable opportunity; and**
- **Some integration with interLATA service is likely.**

The TELCOMP© Model v1.1 (rel. 3 Mar 1999)

LATA: Atlanta GA; POP locations: MCI Worldcom

Model Input Values

Initialization Input Values

108	number of ILEC central offices (COs) in database
1	number of CLEC points of presence
5	ramp-up period (in years)
3	number of residential deciles targeted by CLEC
10	number of business deciles targeted by CLEC

Prices of Unbundled Elements

262	price of a loop multiplexer ($/mo)
16.51	price of an unbundled loop ($/mo)
0.9016	price of a loop crossconnect ($/mo)
76.33	non-recurring price of a loop multiplexer ($)
231.8	price of the first loop multiplexer at CO ($)
42.54	non-recurring price of the first loop at CO ($)
31.33	non-recurring price of additional loops at CO ($)
38.36	price of a DS1channel ($/mo)
0.45231	price per mile of a DS1 channel ($/mile/mo)
78.47	price of a DS1 termination ($/mo)
16	price of a DS1 collocation crossconnect ($/mo)
2.4	price of a DS1 collocation POTS bay ($/mo)
312.89	non-recurring price of a local DS1 channel ($)
11.745	non-recurring price of interoffice DS1 transport ($)
3850	price of first DS1 at CO for collocation application ($)
256	price of first DS1 at CO for collocation ($/mo)
54	non-recurring price of a DS1 for collocation ($)
7.5	price of collocation space for DS1s ($/sq ft)
100	price of first DS1 at CO for collocation space ($/mo)
20000	price of DS1 collocation bay ($)

Model Parameters

0.01	blocking probability
80	loops per loop multiplexer
7.5	square feet per bay
900000	fixed cost of switch
75	switching cost per line
75	switching cost per trunk
100000	maximum switch size (lines + trunks)
0.0033	maintenance expense / gross investment
0.0119	depreciation expense / net plant
0.0333	amortization rate for non-recurring loop costs
0.0119	amortization rate for other non-recurring costs
0.3	sales general and administrative costs / revenues

InterLATA Toll Assumptions

0	Does CLEC provide interLATA toll? (1 if Yes, 0 if No)
0.14	price of interLATA toll ($/min)
0.027	price of access ($/min)
0.6	incremental interLATA toll revenues
0.021	marginal non-capital cost of interLATA toll ($/min)
0.1	marginal capital expenditure of interLATA toll ($/min)
1.8	access minutes per conversation minute

Customer Inputs

CLEC Penetration by Year

0.0056	year 1
0.0167	year 2
0.0278	year 3
0.0389	year 4
0.05	year 5
144908389	total ILEC revenue in area served by CLEC

Georgia Revenues by Customer Decile

res total	res access	bus total	bus access
16174310	8112213	10759780	3429897
12111822	4396874	8306875	1314614
10671772	3204553	7766511	995237
9785495	2495319	7465744	819394
9068810	1871477	7064682	571568
8452885	1351130	6704675	486527
7894335	902803	6172902	324532
7424501	530548	5741597	201090
7073853	246349	5149529	90551
6688134	51992	4793337	8351

2328020	residential loops in Georgia
1078250	business loops in Georgia

Results by Year

	Year 1	Year 2	Year 3	Year 4	Year 5
lines in service	9,323	27,967	46,615	65,264	83,910
lines added	9,323	18,644	18,648	18,649	18,646
SG&A expenditures/line/month	$17.89	$17.89	$17.89	$17.89	$17.89
total network expenses/line/month	$42.71	$33.49	$31.38	$30.35	$29.90
total capital expenditures/line/year	$651.92	$135.52	$81.03	$57.55	$55.85
total depreciation, amortization & maintenance/line/month	$10.05	$5.21	$3.99	$3.35	$3.10
total revenue/line/month	$59.64	$59.64	$59.64	$59.64	$59.64
total capital expenditures per year	6,077,860	3,790,035	3,777,001	$3,756,269	$4,686,772
total capital expenditures per line added per year	$652	$203	$203	$201	$251
total revenue per year	$6,672,100	$20,014,867	$33,360,498	$46,706,844	$60,051,043
total expenses per year	$6,779,803	$17,243,276	$27,559,703	$37,782,318	$48,126,720
profit per year	($107,704)	$2,771,591	$5,800,795	$8,924,526	$11,924,323
cash flow per year	($5,228,268)	$485,957	$3,938,347	$7,397,219	$9,848,385
cumulative cash flow	($5,228,268)	($4,742,311)	($803,964)	$6,593,255	$16,441,640

rate of return	**72.89%**

Input Parameters

MCI Worldcom POPs	1
residential users	3 deciles
business users	10 deciles
central offices (Cos) included	108
objective penetration rate after 5 years	5%
ramp-up	5 years
long distance included (1 if Yes, 0 if No)	0
SG&A percentage	30%

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2328020	residential loops in Georgia
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Results by Year

	Year 1	Year 2	Year 3	Year 4	Year 5
lines in service	17,050	51,151	85,254	119,351	153,459
lines added	17,050	34,101	34,103	34,097	34,108
SG&A expenditures/line/month	$14.16	$14.16	$14.16	$14.16	$14.16
total network expenses/line/month	$35.53	$30.47	$29.42	$28.73	$28.26
total capital expenditures/line/year	$426.27	$121.02	$83.57	$52.58	$40.98
total depreciation, amortization & maintenance/line/month	$6.82	$4.07	$3.44	$2.94	$2.59
total revenue/line/month	$47.22	$47.22	$47.22	$47.22	$47.22
total capital expenditures per year	7,267,940	6,190,481	7,124,563	$6,276,067	$6,288,215
total capital expenditures per line added per year	$426	$182	$209	$184	$184
total revenue per year	$9,660,317	$28,981,517	$48,303,851	$67,622,785	$86,947,951
total expenses per year	$10,168,458	$27,398,397	$44,594,020	$61,429,218	$78,129,446
profit per year	($508,142)	$1,583,120	$3,709,831	$6,193,567	$8,818,505
cash flow per year	($6,570,400)	($2,421,708)	($362,786)	$3,526,417	$6,579,902
cumulative cash flow	($6,570,400)	($8,992,109)	($9,354,894)	($5,828,478)	$751,425

rate of return	**34.12%**

Input Parameters

MCI Worldcom POPs	1
residential users	10 deciles
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total network expenses/line/month	$46.36	$37.13	$35.00	$33.97	$33.51
total capital expenditures/line/year	$668.12	$146.32	$87.51	$62.18	$59.45
total depreciation, amortization & maintenance/line/month	$10.30	$5.45	$4.22	$3.56	$3.30
total revenue/line/month	$74.44	$74.44	$74.44	$74.44	$74.44
total capital expenditures per year	6,228,881	4,092,044	4,079,075	$4,058,359	$4,988,814
total capital expenditures per line added per year	$668	$219	$219	$218	$268
total revenue per year	$8,328,498	$24,983,708	$41,642,492	$58,302,169	$74,959,165
total expenses per year	$7,684,911	$19,955,324	$32,073,355	$44,092,765	$56,229,465
profit per year	$643,587	$5,028,385	$9,569,137	$14,209,403	$18,729,701
cash flow per year	($4,606,424)	$2,502,377	$7,500,599	$12,505,434	$16,502,379
cumulative cash flow	($4,606,424)	($2,104,047)	$5,396,553	$17,901,987	$34,404,366

rate of return	**126.73%**

Input Parameters

MCI Worldcom POPs	1
residential users	3 deciles
business users	10 deciles
central offices (Cos) included	108
objective penetration rate after 5 years	5%
ramp-up	5 years
long distance included (1 if Yes, 0 if No)	1
SG&A percentage	30%